

REMARKS

Status Summary

In this Amendment, no claims are added and no claims are cancelled, therefore claims 1-36, 39-49, and 52-63 remain pending.

Telephone Examiner Interview

Applicants greatly appreciate the Telephone Examiner Interview granted them on June 10, 2003. The amendments above and the remarks below are consistent with the discussion in the Examiner Interview.

In addition, as per a subsequent telephone call from the Examiner, Applicants have filed a Request for Continued Examination concurrently with this Response so that the amendments proposed herein will be entered.

Claim Rejections 35 U.S.C. § 102

Claims 1-32 and 34-59 were rejected under 35 U.S.C. § 102(b) as anticipated by U.S. Patent No. 6,505,046 to Baker (hereinafter, "Baker"). This rejection is respectfully traversed.

The present invention, for example as claimed in independent claims 1, 14, 34, 45, and 57 are proposed to be amended to recite methods and systems for receiving a plurality of call signaling messages, screening call signaling messages that relate to a change in location of a subscriber, correlating the messages that relate to the change in location, generating a change in location indication message, sending the change in location indication message, and generating an SMS message, automatically in response to the change in location of the mobile subscriber.

(Emphasis added.) Screening messages relating to a change in location of a mobile subscriber, correlating the messages, generating the change in location indication message, and sending the SMS message to the mobile subscriber automatically in response to a change in location of the subscriber eliminates the need for the subscriber to do anything in order to receive the SMS message. For example, when a subscriber changes location, a sequence of messages is sent between HLR and a

VLR. A telecommunications network element of the present invention automatically intercepts these messages, correlates the messages, and generates the change in location indication message. The change in location indication message automatically triggers the SMSC to generate an SMS message to the mobile subscriber (See page 3, line 15 through page 6, line 15 of the present specification.)

There is absolutely no disclosure in Baker of a telecommunications network element that automatically: 1) screens and correlates messages in response to a change in location of a mobile subscriber and 2) generates a change in location indication message in response to the change in location of the mobile subscriber. According to Baker, a mobile subscriber is required to dial a special phone number in order to receive messages from WSN 301. For example, in column 2, lines 19-23

Baker states:

In a cellular or mobility network of the present invention, the distribution process is triggered when subscribers visit a retail location and dial a predefined, advertised number using a radio telephone.

Similarly, in column 8, lines 11-16, Baker further illustrates the necessity of dialing the special telephone number in order to receive messages from WSN 301. This portion of Baker states as follows:

Once the subscribers in the general vicinity of the retail location, such as inside the mall commons or retail outlet, they can dial the predefined network telephone number. The MSC/HLR component is configured to send an origination request to the wireless service node (WSN) when any subscriber dials this number.

Thus, rather than teaching a system that generates a change in location indication message automatically in response to a change in location of a mobile subscriber, Baker teaches a system that requires the subscriber to dial a predetermined telephone number in order to receive advertisements from WSN 301. Because Baker fails to teach or suggest the invention claimed in the independent claims of the present application, it is respectfully submitted that the rejection of claims 1-32 and 34-59 as anticipated by Baker should be withdrawn.

Claim Rejections 35 U.S.C. § 103

Claims 2-4, 15-17, and 60-63 were rejected under 35 U.S.C. § 103(a) as unpatentable over Baker in view of European Patent Application No. 0 710 043 A1 to Brown (hereinafter, "Brown"). This rejection is respectfully traversed.

As stated above, Baker fails to teach or remotely suggest a method or a system that automatically: screens messages relating to a change in location of a mobile subscriber, correlates the messages, generates a change in location indication message, and, in response to the change in location indication message, generates an SMS message to the subscriber. Brown likewise fails to teach or suggest such a system. As a preliminary matter, rather than monitoring messages relating to change a location of a single subscriber and correlating these messages, Brown relates only to detecting location update messages from a plurality of different subscribers and combining these messages to determine topology information for a network. (See column 2, lines 1-24 of Brown.) In addition, as indicated in Applicants' Amendment A, Brown teaches that the monitoring of the location update messages is performed by a computer 42, which is external to the mobile communications network. In other words, Brown fails to teach performing the steps of the present invention at a telecommunications network element. The main purpose of the system illustrated in Brown is to identify new location areas not previously identified. (See column 10, lines 55-60 of Brown.) There is no disclosure of using the processing steps in Brown to generate a change in location indication message or deliver an SMS message to a subscriber. Thus, for these reasons alone, it is respectfully submitted that the rejection of claims 2-4, 15-17, and 60-63 as unpatentable over Baker in view of Brown should be withdrawn.

Moreover, with regard to claims 60-63, the Examiner stated:

Brown further teaches the method of call routing from a signal transfer point to the appropriate destination based on call signaling messages. See column 5, line 49 through column 6, line 10 and column 6 lines 50-56. (See page 4, paragraph 4 of Official Action mailed April 11, 2003.)

Column 5, line 49 through column 6, line 10 of Brown define mobility management and call management in a GSM network. These paragraphs do not even mention an

STP, not to mention performing the message screening, correlation, and generation steps claimed in the independent claims of the present application. Column 6, lines 50-56 of Brown state that in a GSM network, location update messages are only generated when a subscriber moves to a new location area, rather than every time the subscriber changes cells. Again, the cited portion of Brown does not even mention an STP. Accordingly, for these additional reasons, it is respectfully submitted that the rejection of claims 60-63 should be withdrawn.

Claims 10, 23, and 28-31 were rejected as unpatentable over Baker in view of German Patent Application No. DE 198 05 261 A 1 to Jung (hereinafter, "Jung"). This rejection is respectfully traversed.

Claim 10 depends from claim 1, claim 23 depends from claim 14, and claims 28-31 depend from claim 26. As stated above, Baker fails to teach or suggest a method or a system that automatically: receives messages relating to a change in location of a mobile subscriber, screens the messages, and correlates the messages. Moreover, in each of the independent claims, the screening and correlating steps are performed at a telecommunications network element, such as a signal transfer point. Jung fails to supply these elements that are missing from Baker. As stated in Applicants' response to the previous Office Action, Jung explicitly states that messages are not received at a telecommunications network element. For example, on page 3 of the English translation of Jung it is stated:

No changes in the telecommunications network elements (VLR, HLR, MSC) are necessary.

Jung teaches that messages are received at protocol monitors 18 and 19 illustrated in Figure 2. Thus, based on this passage and Figure 2, Jung expressly teaches away from receiving a plurality of mobile call signaling messages out of a telecommunications network element.

Even assuming for the sake of argument that Jung could be construed to teach or suggest receiving a plurality of call signaling messages at a telecommunications network element, there is no teaching or suggestion of screening call signaling

messages relating to a change in location of a mobile subscriber, not to mention performing such screening operations at a telecommunications network element. In contrast to screening selected messages, Jung states on page 4 of the English translation:

Protocol recording devices 18 and 19 are used to monitor all transitions from the mobile telecommunications network in to the international telecommunications network 17 having CCS7 signaling.

Thus, rather than screening specific messages that relate to a change in location of a subscriber, Jung teaches that protocol monitors 18 and 19 capture all SS7 messages that enter the network 17. Capturing all messages is not the same as screening messages and results in increased processing load on downstream elements such as computer 21 of Jung.

In contrast to Jung, the telecommunications network element in the independent claims of the present application automatically screens selected messages that relate to a change in location of a mobile subscriber so that subsequent processing and memory requirements for correlating the messages are reduced. Thus, because Baker and Jung fail to disclose a telecommunications network element that automatically screens call signaling messages that relate to a change in location of a mobile subscriber, it is respectfully submitted that the rejection of claims 10, 23, and 28-31 should be withdrawn.

Claim 33 was rejected as unpatentable over Baker in view of Brown. This rejection is respectfully traversed.

Claim 33 depends from claim 26. Claim 26 recites a method for correlating call signaling messages wherein the receiving, screening, and correlating messages are performed automatically in response to a change in location of a mobile subscriber. In addition, the correlation steps are performed at a telecommunications network element. As stated above, Baker teaches that a special telephone call is required in order to initiate delivery of an SMS message to a subscriber. There is no correlation performed by Baker. The fact that a special telephone call is required eliminates the need for correlation. Baker thus is directed to a system for manual triggering of

message transmission to a subscriber. Brown likewise fails to teach such an automatic message correlation system. As stated above, Brown teaches a system that examines location update messages from a plurality of different subscribers in order to determine network topology information. Thus, because Baker and Brown fail to teach or even remotely suggest the invention in claim 33, it is respectfully submitted that the rejection of claim 33 should be withdrawn.

CONCLUSION

In light of the above amendments and remarks, it is respectfully submitted that the present application is now in proper condition for allowance, and such action is earnestly solicited.

If any small matter should remain outstanding after the Patent Examiner has had an opportunity to review the above Remarks, the Patent Examiner is respectfully requested to telephone the undersigned patent attorney in order to resolve these matters and avoid the issuance of another Official Action.

DEPOSIT ACCOUNT

The Commissioner is hereby authorized to charge any fees associated with the filing of this correspondence to Deposit Account No. 50-0426.

Respectfully submitted,

JENKINS & WILSON, P.A.

Date: June 11, 2003

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